

SEQUENCE LISTING

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<120> CYTOCHROME C PROTEIN AND ASSAY

<130> PA0394

<140> TO BE ASSIGNED
 <141> 2006-06-19

<150> PCT/GB2004/005317
 <151> 2004-12-17

<150> GB 0329353.7
 <151> 2003-12-19

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<170> PatentIn version 3.3

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 <212> DNA
 <213> Homo sapiens

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 acaggtcagg cccctggata ctcttacaca gccgccaata agaacaagg catcatctgg 180
 ggagaggata cactgatgga gtatttggag aatcccaaga agtacatccc tggAACAAA 240
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 <213> Homo sapiens

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Met Gly Asp Val Glu Lys Gly Lys Lys Ile Phe Ile Met Lys Cys Ser
 1 5 10 15

Gln Cys His Thr Val Glu Lys Gly Lys His Lys Thr Gly Pro Asn
 20 25 30

Leu His Gly Leu Phe Gly Arg Lys Thr Gly Gln Ala Pro Gly Tyr Ser
 35 40 45

Tyr Thr Ala Ala Asn Lys Asn Lys Gly Ile Ile Trp Gly Glu Asp Thr
 50 55 60

Leu Met Glu Tyr Leu Glu Asn Pro Lys Lys Tyr Ile Pro Gly Thr Lys
65 70 75 80

Met Ile Phe Val Gly Ile Lys Lys Lys Glu Glu Arg Ala Asp Leu Ile
85 90 95

Ala Tyr Leu Lys Lys Ala Thr Asn Glu
100 105

<210> 3
<211> 1044
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

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aaacttaccc ttaaatttat ttgcactact ggaaaactac ctgttccatg gccaacactt 180
gtcactactc tctcttatgg tttcaatgc tttcaagat acccagatca tatgaaacgg 240
catgactttt tcaagagtgc catgcccga gtttatgtac aggaaagaac tatattttc 300
aaagatgacg ggaactacaa gacacgtgct gaagtcaagt ttgaaggtga tacccttgc 360
aatagaatcg agttaaaagg tattgatttt aaagaagatg gaaacattct tggacacaaa 420
ttggaataca actataactc acacaatgta tacatcatgg cagacaaaca aaagaatgga 480
atcaaagtta acttcaaaat tagacacaac attgaagatg gaggcgttca actagcagac 540
cattatcaac aaaatactcc aattggcgat ggcctgtcc ttttaccaga caaccattac 600
ctgtccacac aatctgccct ttcgaaaagat cccaacgaaa agagagacca catggccctt 660
cttggctttg taacagctgc tgggattaca catggcatgg atgaactata caaactcgag 720
aattcgacca tgggtgatgt tgagaaaggc aagaagattt ttattatgaa gtgttcccag 780
tgccacaccc ttgaaaagg aggcaagcac aagactggc caaatctcca tggctcttt 840
gggcggaga caggtcaggc ccctggatac tcttacacag ccgccaataa gaacaaaggc 900
atcatctggg gagaggatac actgatggag tatttggaga atcccgccaa gtacatccct 960
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<210> 4
<211> 348
<212> PRT
<213> Artificial Sequence

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<223> Synthetic polypeptide

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Met Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val
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Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu
20 25 30

Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys
35 40 45

Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Leu
50 55 60

Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg
65 70 75 80

His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg
85 90 95

Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val
100 105 110

Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile
115 120 125

Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn
130 135 140

Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly
145 150 155 160

Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Gly Val
165 170 175

Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro
180 185 190

Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser
195 200 205

Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Gly Phe Val
210 215 220 225

Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys Leu Glu
230 235 240

Asn Ser Thr Met Gly Asp Val Glu Lys Gly Lys Ile Phe Ile Met

245

250

255

Lys Cys Ser Gln Cys His Thr Val Glu Lys Gly Gly Lys His Lys Thr
 260 265 270

Gly Pro Asn Leu His Gly Leu Phe Gly Arg Lys Thr Gly Gln Ala Pro
 275 280 285

Gly Tyr Ser Tyr Thr Ala Ala Asn Lys Asn Lys Gly Ile Ile Trp Gly
 290 295 300

Glu Asp Thr Leu Met Glu Tyr Leu Glu Asn Pro Ala Lys Tyr Ile Pro
 305 310 315 320

Gly Thr Lys Met Ile Phe Val Gly Ile Lys Lys Glu Glu Arg Ala
 325 330 335

Asp Leu Ile Ala Tyr Leu Lys Lys Ala Thr Asn Glu
 340 345

<210> 5

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<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide

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acaggtcagg cccctggata ctcttacaca gccgccaata agaacaagg catcatctgg 180

ggagaggata cactgtatgg aatccgcata agtacatccc tggaaacaaa 240

atgatctttt tcggcattaa gaagaaggaa gaaaggcag acttaatgc ttatctaaa 300

aaagctacta atgagggtcg acccggtatg agtaaaggag aagaactttt cactggagtt 360

gtcccaattt ttgttgaatt agatggatgat gttatggc acaaatttc tgcgtgg 420

gagggtgaag gtatgcac atacggaaaa cttaccctta aatttatttg cactactgg 480

aaactacctg ttccatggcc aacacttgc actactctt cttatgggt tcaatgttt 540

tcaagatacc cagatcatat gaaacggcat gacttttca agagtccat gcccgaaggt 600

tatgtacagg aaagaactat attttcaaa gatgacggga actacaagac acgtgctgaa 660

gtcaagttt aaggtatac cttgttaat agaatcgagt taaaaggat tgatttaaa 720

gaagatggaa acattcttgg acacaaatttgaataacaact ataactcaca caatgtatac 780

atcatggcag acaaacaaaa gaatggaatc aaagttaact tcaaaaatttgc acacaacatt 840

gaagatggag gcgttcaact agcagaccat tatcaacaaa atactccat tggcgatggc 900

cctgtccttt taccagacaa ccattacctg tccacacaat ctgcccttc gaaagatccc 960
aacgaaaaga gagaccacat ggtccttctt ggctttgtaa cagctgctgg gattacacat 1020
ggcatggatg aactatacaa a 1041

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<212> PRT
<213> Artificial Sequence

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<223> Synthetic polypeptide

<400> 6

Met Gly Asp Val Glu Lys Gly Lys Lys Ile Phe Ile Met Lys Cys Ser
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Gln Cys His Thr Val Glu Lys Gly Gly Lys His Lys Thr Gly Pro Asn
20 25 30

Leu His Gly Leu Phe Gly Arg Lys Thr Gly Gln Ala Pro Gly Tyr Ser
35 40 45

Tyr Thr Ala Ala Asn Lys Asn Lys Gly Ile Ile Trp Gly Glu Asp Thr
50 55 60

Leu Met Glu Tyr Leu Glu Asn Pro Ala Lys Tyr Ile Pro Gly Thr Lys
65 70 75 80

Met Ile Phe Val Gly Ile Lys Lys Lys Glu Glu Arg Ala Asp Leu Ile
85 90 95

Ala Tyr Leu Lys Lys Ala Thr Asn Glu Gly Arg Pro Gly Met Ser Lys
100 105 110

Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val Glu Leu Asp
115 120 125

Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu Gly Glu Gly
130 135 140

Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys Thr Thr Gly
145 150 155 160

Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Leu Ser Tyr Gly
165 170 175

Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg His Asp Phe
180 185 190

Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg Thr Ile Phe
195 200 205

Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val Lys Phe Glu
210 215 220

Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile Asp Phe Lys
225 230 235 240

Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn Tyr Asn Ser
245 250 255

His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly Ile Lys Val
260 265 270

Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Gly Val Gln Leu Ala
275 280 285

Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro Val Leu Leu
290 295 300

Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser Lys Asp Pro
305 310 315 320

Asn Glu Lys Arg Asp His Met Val Leu Leu Gly Phe Val Thr Ala Ala
325 330 335

Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys
340 345

<210> 7

<211> 1044

<212> DNA

<213> Artificial Sequence

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<223> synthetic oligonucleotide

<400> 7

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aaacttaccc	ttaaatttat	ttgcactact	ggaaaactac	ctgttccatg	gccaacactt	180
gtcactactc	tctcttatgg	tgttcaatgc	ttttcaagat	acccagatca	tatgaaacgg	240
catgactttt	tcaagagtgc	catgcccgaa	ggttatgtac	aggaaagaac	tatattttc	300
aaagatgacg	ggaactacaa	gacacgtgct	gaagtcaagt	ttgaaggtga	tacccttgtt	360
aatagaatcg	agttaaaagg	tattgatttt	aaagaagatg	gaaacattct	tggacacaaa	420
ttggaataca	actataactc	acacaatgta	tacatcatgg	cagacaaaca	aaagaatgga	480

atcaaagtta	acttcaaaat	tagacacaac	attgaagatg	gaggcgttca	actagcagac	540
cattatcaac	aaaatactcc	aattggcgat	ggccctgtcc	ttttaccaga	caaccattac	600
ctgtccacac	aatctgccct	ttcgaaagat	cccaacgaaa	agagagacca	catggtcctt	660
cttggcttg	taacagctgc	tgggattaca	catggcatgg	atgaactata	caaactcgag	720
aattcgacca	tgggtgatgt	tgagaaaggc	aagaagattt	ttattatgaa	gtgttcccag	780
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gggcggaaga	caggtcaggc	ccctggatac	tcttacacag	ccgccaataa	gaacaaaggc	900
atcatctggg	gagaggatac	actgatggag	tatggaga	atcccaagaa	gtacatccct	960
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<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic polypeptide

<400> 8

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		20				25						30			

Gly	Glu	Gly	Asp	Ala	Thr	Tyr	Gly	Lys	Leu	Thr	Leu	Lys	Phe	Ile	Cys
	35				40						45				

Thr	Thr	Gly	Lys	Leu	Pro	Val	Pro	Trp	Pro	Thr	Leu	Val	Thr	Thr	Leu
	50				55					60					

Ser	Tyr	Gly	Val	Gln	Cys	Phe	Ser	Arg	Tyr	Pro	Asp	His	Met	Lys	Arg
	65			70				75					80		

His	Asp	Phe	Phe	Lys	Ser	Ala	Met	Pro	Glu	Gly	Tyr	Val	Gln	Glu	Arg
		85					90					95			

Thr	Ile	Phe	Phe	Lys	Asp	Asp	Gly	Asn	Tyr	Lys	Thr	Arg	Ala	Glu	Val
		100				105					110				

Lys	Phe	Glu	Gly	Asp	Thr	Leu	Val	Asn	Arg	Ile	Glu	Leu	Lys	Gly	Ile
		115					120				125				

Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn

130

135

140

Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly
145 150 155 160

Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Gly Val
165 170 175

Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro
180 185 190

Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser
195 200 205

Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Gly Phe Val
210 215 220

Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys Leu Glu
225 230 235 240

Asn Ser Thr Met Gly Asp Val Glu Lys Gly Lys Lys Ile Phe Ile Met
245 250 255

Lys Cys Ser Gln Cys His Thr Val Glu Lys Gly Gly Lys His Lys Thr
260 265 270

Gly Pro Asn Leu His Gly Leu Phe Gly Arg Lys Thr Gly Gln Ala Pro
275 280 285

Gly Tyr Ser Tyr Thr Ala Ala Asn Lys Asn Lys Gly Ile Ile Trp Gly
290 295 300

Glu Asp Thr Leu Met Glu Tyr Leu Glu Asn Pro Lys Lys Tyr Ile Pro
305 310 315 320

Gly Thr Lys Met Ile Phe Val Gly Ile Lys Lys Lys Glu Glu Arg Ala
325 330 335

Asp Leu Ile Ala Tyr Leu Lys Lys Ala Thr Asn Glu
340 345

<210> 9

<211> 1041

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide

<400> 9

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acaggtcagg	cccttgata	ctcttacaca	gccgccaata	agaacaaagg	catcatctgg	180
ggagaggata	cactgatgga	gtattggag	aatccaaaga	agtacatccc	tggaacaaaa	240
atgatcttg	tcggcattaa	gaagaaggaa	gaaagggcag	acttaatagc	ttatctcaa	300
aaagctacta	atgagggtcg	acccgggatg	agtaaaggag	aagaactttt	cactggagtt	360
gtcccaattc	ttgttgaatt	agatggtcat	gttaatgggc	acaaatttc	tgtcagtgg	420
gagggtgaag	gtgatgcaac	atacggaaaa	cttaccctta	aatttatttg	cactactgga	480
aaactacctg	ttccatggcc	aacacttgc	actactctct	cttatggtgt	tcaatgctt	540
tcaagatacc	cagatcatat	gaaacggcat	gacttttca	agagtccat	ccccgaaggt	600
tatgtacagg	aaagaactat	attttcaaa	gatgacggga	actacaagac	acgtgctgaa	660
gtcaagttt	aaggtgatac	ccttgttaat	agaatcgagt	taaaaggtat	tgattttaaa	720
gaagatggaa	acattcttgg	acacaaattg	gaatacaact	ataactcaca	caatgtatac	780
atcatggcag	acaaacaaaa	aatggaatc	aaagttaact	tcaaaattag	acacaacatt	840
gaagatggag	gcgttcaact	agcagaccat	tatcaacaaa	atactccat	tggcgatggc	900
cctgtccctt	taccagacaa	ccattacctg	tccacacaat	ctgccccttc	gaaagatccc	960
aacgaaaaga	gagaccacat	ggtccttctt	ggcttgtaa	cagctgctgg	gattacacat	1020
ggcatggatg	aactatacaa	a				1041

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 <223> Synthetic polypeptide

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Met Gly Asp Val Glu Lys Gly Lys Lys Ile Phe Ile Met Lys Cys Ser
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Gln Cys His Thr Val Glu Lys Gly Gly Lys His Lys Thr Gly Pro Asn
 20 25 30

Leu His Gly Leu Phe Gly Arg Lys Thr Gly Gln Ala Pro Gly Tyr Ser
 35 40 45

Tyr Thr Ala Ala Asn Lys Asn Lys Gly Ile Ile Trp Gly Glu Asp Thr
 50 55 60

Leu Met Glu Tyr Leu Glu Asn Pro Lys Lys Tyr Ile Pro Gly Thr Lys
 65 70 75 80

Met Ile Phe Val Gly Ile Lys Lys Lys Glu Glu Arg Ala Asp Leu Ile
85 90 95

Ala Tyr Leu Lys Lys Ala Thr Asn Glu Gly Arg Pro Gly Met Ser Lys
100 105 110

Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val Glu Leu Asp
115 120 125

Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu Gly Glu Gly
130 135 140

Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys Thr Thr Gly
145 150 155 160

Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Leu Ser Tyr Gly
165 170 175

Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg His Asp Phe
180 185 190

Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg Thr Ile Phe
195 200 205

Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val Lys Phe Glu
210 215 220

Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile Asp Phe Lys
225 230 235 240

Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn Tyr Asn Ser
245 250 255

His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly Ile Lys Val
260 265 270

Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Gly Val Gln Leu Ala
275 280 285

Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro Val Leu Leu
290 295 300

Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser Lys Asp Pro
305 310 315 320

Asn Glu Lys Arg Asp His Met Val Leu Leu Gly Phe Val Thr Ala Ala
325 330 335

Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys
340 345

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